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NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Apr 08 "Ask CAS" for self-help around the clock
NEWS 3 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4 Apr 09 ZDB will be removed from STN
NEWS 5 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7 Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available
NEWS 9 Jun 03 New e-mail delivery for search results now available
NEWS 10 Jun 10 MEDLINE Reload
NEWS 11 Jun 10 PCTFULL has been reloaded
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;
saved answer sets no longer valid
NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY
NEWS 15 Jul 30 NETFIRST to be removed from STN
NEWS 16 Aug 08 CANCERLIT reload
NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18 Aug 08 NTIS has been reloaded and enhanced
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
now available on STN
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file
NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 28 Oct 21 EVENTLINE has been reloaded
NEWS 29 Oct 24 BEILSTEIN adds new search fields
NEWS 30 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 31 Oct 25 MEDLINE SDI run of October 8, 2002
NEWS 32 Nov 18 DKILIT has been renamed APOLLIT
NEWS 33 Nov 25 More calculated properties added to REGISTRY
NEWS 34 Dec 02 TIBKAT will be removed from STN
NEWS 35 Dec 04 CSA files on STN
NEWS 36 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 37 Dec 17 TOXCENTER enhanced with additional content
NEWS 38 Dec 17 Adis Clinical Trials Insight now available on STN
NEWS 39 Dec 30 ISMEC no longer available

NEWS EXPRESS January 6 CURRENT WINDOWS VERSION IS V6.01a,
CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
NEWS HOURS STN Operating Hours Plus Help Desk Availability
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NEWS PHONE Direct Dial and Telecommunication Network Access to STN
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FILE 'HOME' ENTERED AT 09:21:39 ON 07 JAN 2003

=> file medline biosis embase caplus
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FULL ESTIMATED COST	0.21	0.21

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FILE 'BIOSIS' ENTERED AT 09:21:52 ON 07 JAN 2003
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=> s kato shigeaki /au
L1 448 KATO SHIGEAKI

=> s takeyama ken-ichi /au
L2 53 TAKEYAMA KEN-ICHI

=> s kitanaka sachiko /au
L3 40 KITANAKA SACHIKO

=> s l1 and l2 and l3
L4 26 L1 AND L2 AND L3

=> dup rem l4
PROCESSING COMPLETED FOR L4
L5 14 DUP REM L4 (12 DUPLICATES REMOVED)

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L5 ANSWER 1 OF 14 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 2002266794 MEDLINE
DOCUMENT NUMBER: 22001224 PubMed ID: 12006701
TITLE: Molecular genetics of vitamin D- dependent hereditary rickets.
AUTHOR: **Kato Shigeaki**; Yoshizazawa Tatsuya; **Kitanaka Sachiko**; Murayama Akiko; **Takeyama Ken-ichi**
CORPORATE SOURCE: Institute of Molecular and Cellular Biosciences, University of Tokyo, and CREST, Japan Science and Technology Corporation, Saitama, Japan.. uskato@mail.ecc.u-tokyo.ac.jp
SOURCE: HORMONE RESEARCH, (2002) 57 (3-4) 73-8. Ref: 39
Journal code: 0366126. ISSN: 0301-0163.
PUB. COUNTRY: Switzerland
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200210
ENTRY DATE: Entered STN: 20020514
Last Updated on STN: 20021031
Entered Medline: 20021030

L5 ANSWER 2 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2
ACCESSION NUMBER: 2001:476798 BIOSIS

DOCUMENT NUMBER: PREV200100476798
TITLE: The molecular basis of vitamin D-dependent rickets type I.
AUTHOR(S): **Kitanaka, Sachiko (1)**; **Takeyama, Ken-ichi** ; Murayama, Akiko; **Kato, Shigeaki**
CORPORATE SOURCE: (1) Department of Pediatrics, Faculty of Medicine, The University of Tokyo, 7-3-1, Bunkyo-ku, Tokyo, 113-8655 Japan
SOURCE: Endocrine Journal, (August, 2001) Vol. 48, No. 4, pp. 427-432. print.
ISSN: 0918-8959.
DOCUMENT TYPE: General Review
LANGUAGE: English
SUMMARY LANGUAGE: English

L5 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:96372 CAPLUS
DOCUMENT NUMBER: 130:163951
TITLE: Cloning of cDNA for ligand-converting enzymes from mice and human, and methods of screening nuclear receptors-binding ligands or transcription factors
INVENTOR(S): **Kato, Shigeaki**; **Takeyama, Ken-ichi** ; **Kitanaka, Sachiko**
PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9905292	A1	19990204	WO 1998-JP3280	19980722
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9883564	A1	19990216	AU 1998-83564	19980722
JP 11127871	A2	19990518	JP 1998-206786	19980722
EP 1024193	A1	20000802	EP 1998-933895	19980722
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: JP 1997-212624 A 19970722
WO 1998-JP3280 W 19980722
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 3
ACCESSION NUMBER: 2000:18296 BIOSIS
DOCUMENT NUMBER: PREV200000018296
TITLE: No enzyme activity of 25-hydroxyvitamin D3 1alpha-hydroxylase gene product in pseudovitamin D deficiency rickets, including that with mild clinical manifestation.
AUTHOR(S): **Kitanaka, Sachiko**; Murayama, Akiko; Sakaki, Toshiyuki; Inouye, Kuniyo; Seino, Yoshiki; Fukumoto, Seiji; Shima, Masaaki; Yukizane, Shigenori; Takayanagi, Masaki; Niimi, Hiroo; **Takeyama, Ken-Ichi**; **Kato, Shigeaki (1)**
CORPORATE SOURCE: (1) Institute of Molecular and Cellular Biosciences,

University of Tokyo, 1-1-1 Yayoi, Bunkyo-ku, Tokyo, 113-0032 Japan
SOURCE: Journal of Clinical Endocrinology & Metabolism, (Nov., 1999) Vol. 84, No. 11, pp. 4111-4117.
ISSN: 0021-972X.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

L5 ANSWER 5 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 4
ACCESSION NUMBER: 1999:237495 BIOSIS
DOCUMENT NUMBER: PREV199900237495
TITLE: Positive and negative regulations of the renal 25-hydroxyvitamin D3 1alpha-hydroxylase gene by parathyroid hormone, calcitonin, and 1alpha,25(OH)2D3 in intact animals.
AUTHOR(S): Murayama, Akiko; **Takeyama, Ken-ichi**; **Kitanaka, Sachiko**; Kodera, Yasuo; Kawaguchi, Yoshindo; Hosoya, Tatsuo; **Kato, Shigeaki (1)**
CORPORATE SOURCE: (1) Institute of Molecular and Cellular Biosciences, University of Tokyo, Yayoi 1-1-1, Bunkyo-ku, Tokyo, 113-0032 Japan
SOURCE: Endocrinology, (May, 1999) Vol. 140, No. 5, pp. 2224-2231.
ISSN: 0013-7227.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

L5 ANSWER 6 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 5
ACCESSION NUMBER: 1999:96871 BIOSIS
DOCUMENT NUMBER: PREV199900096871
TITLE: Selective interaction of vitamin D receptor with transcriptional coactivators by a vitamin D analog.
AUTHOR(S): **Takeyama, Ken-Ichi**; Masuhiro, Yoshikazu; Fuse, Hiroaki; Endoh, Hideki; Murayama, Akiko; **Kitanaka, Sachiko**; Suzawa, Miyuki; Yanagisawa, Junn; **Kato, Shigeaki (1)**
CORPORATE SOURCE: (1) Inst. Molecular Cellular Biosciences, Univ. Tokyo, Yayoi 1-1-1, Bunkyo-ku, Tokyo 113 Japan
SOURCE: Molecular and Cellular Biology, (Feb., 1999) Vol. 19, No. 2, pp. 1049-1055.
ISSN: 0270-7306.
DOCUMENT TYPE: Article
LANGUAGE: English

L5 ANSWER 7 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 6
ACCESSION NUMBER: 2000:1847 BIOSIS
DOCUMENT NUMBER: PREV200000001847
TITLE: Enzymatic properties of human 25-hydroxyvitamin D3 1alpha-hydroxylase. Coexpression with adrenodoxin and NADPH-adrenodoxin reductase in Escherichia coli.
AUTHOR(S): Sawada, Natsumi; Sakaki, Toshiyuki; **Kitanaka, Sachiko**; **Takeyama, Ken-ichi**; **Kato, Shigeaki**; Inouye, Kuniyo (1)
CORPORATE SOURCE: (1) Division of Applied Life Sciences, Graduate School of Agriculture, Kyoto University, Sakyo-ku, Kyoto, 606-8502 Japan
SOURCE: European Journal of Biochemistry, (Nov., 1999) Vol. 265, No. 3, pp. 950-956.
ISSN: 0014-2956.
DOCUMENT TYPE: Article
LANGUAGE: English

SUMMARY LANGUAGE: English

L5 ANSWER 8 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1999:529546 BIOSIS
DOCUMENT NUMBER: PREV199900529546
TITLE: Identification of a novel vitamin D negative response element in the human 25-hydroxyvitamin D3 1alpha-hydroxylase gene promoter.
AUTHOR(S): Murayama, Akiko (1); **Takeyama, Ken-ichi (1)**; **Kitanaka, Sachiko (1)**; Kawaguchi, Yoshindo; Hosoya, Tatsuo; **Kato, Shigeaki (1)**
CORPORATE SOURCE: (1) Institute of Molecular and Cellular Biosciences, University of Tokyo, Tokyo Japan
SOURCE: Journal of the American Society of Nephrology, (Sept., 1999) Vol. 10, No. PROGRAM AND ABSTR. ISSUE, pp. 622A. Meeting Info.: 32nd Annual Meeting of the American Society of Nephrology Miami Beach, Florida, USA November 1-8, 1999 American Society of Nephrology . ISSN: 1046-6673.
DOCUMENT TYPE: Conference
LANGUAGE: English

L5 ANSWER 9 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 7
ACCESSION NUMBER: 1999:396754 BIOSIS
DOCUMENT NUMBER: PREV199900396754
TITLE: In vivo function of VDR in gene expression-VDR knock-out mice.
AUTHOR(S): **Kato, Shigeaki (1)**; **Takeyama, Ken-ichi**; **Kitanaka, Sachiko**; Murayama, Akiko; Sekine, Keisuke; Yoshizawa, Tatsuya
CORPORATE SOURCE: (1) Institute of Molecular and Cellular Biosciences, The University of Tokyo, Bunkyo-ku, Tokyo, 113 Japan
SOURCE: Journal of Steroid Biochemistry and Molecular Biology, (April June, 1999) Vol. 69, No. 1-6, pp. 247-251. ISSN: 0960-0760.
DOCUMENT TYPE: General Review
LANGUAGE: English
SUMMARY LANGUAGE: English

L5 ANSWER 10 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1999:431087 BIOSIS
DOCUMENT NUMBER: PREV199900431087
TITLE: Identification of a novel vitamin D negative response element in the human 25-hydroxyvitamin D3 1alpha-hydroxylase gene promoter.
AUTHOR(S): Murayama, Akiko (1); **Takeyama, Ken-ichi (1)**; **Kitanaka, Sachiko (1)**; Kodera, Yasuo (1); **Kato, Shigeaki (1)**
CORPORATE SOURCE: (1) Institution of Molecular and Cellular Biosciences, University of Tokyo, Bunkyo-ku, Tokyo Japan
SOURCE: Journal of Bone and Mineral Research, (Sept., 1999) Vol. 14, No. SUPPL. 1, pp. S167. Meeting Info.: Twenty-First Annual Meeting of the American Society for Bone and Mineral Research St. Louis, Missouri, USA September 30-October 4, 1999 American Society for Bone and Mineral Research . ISSN: 0884-0431.
DOCUMENT TYPE: Conference
LANGUAGE: English

L5 ANSWER 11 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 8
ACCESSION NUMBER: 1998:165815 BIOSIS
DOCUMENT NUMBER: PREV199800165815

TITLE: Inactivating mutations in the 25-hydroxyvitamin D3 1alpha-hydroxylase gene in patients with pseudovitamin D-deficiency rickets.
AUTHOR(S): **Kitanaka, Sachiko; Takeyama, Ken-Ichi;** Murayama, Akiko; Sato, Takashi; Okumura, Katsuzumi; Nogami, Masahiro; Hasegawa, Yukihiro; Nimi, Hiroo; Yanagisawa, Junn; Tanaka, Toshiaki; **Kato, Shigeaki (1)**
CORPORATE SOURCE: (1) Inst. Mol. Cell. Biosci., Univ. Tokyo, Yayoi, Bunkyo-ku, Tokyo 113-0032 Japan
SOURCE: New England Journal of Medicine, (March 5, 1998) Vol. 338, No. 10, pp. 653-661.
ISSN: 0028-4793.
DOCUMENT TYPE: Article
LANGUAGE: English

L5 ANSWER 12 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 9
ACCESSION NUMBER: 1998:404828 BIOSIS
DOCUMENT NUMBER: PREV199800404828
TITLE: The promoter of the human 25-hydroxyvitamin D3 1alpha-hydroxylase gene confers positive and negative responsiveness to PTH, calcitonin, and 1alpha,25(OH)2D3.
AUTHOR(S): Murayama, Akiko (1); **Takeyama, Ken-Ichi (1);** **Kitanaka, Sachiko (1)**; Kodera, Yasuo (1); Hosoya, Tatsuo; **Kato, Shigeaki**
CORPORATE SOURCE: (1) Inst. Mol. Cell. Biosci., Univ. Tokyo, Yayoi 1-1, Bunkyo, Tokyo 113-0032 Japan
SOURCE: Biochemical and Biophysical Research Communications, (Aug. 10, 1998) Vol. 249, No. 1, pp. 11-16.
ISSN: 0006-291X.
DOCUMENT TYPE: Article
LANGUAGE: English

L5 ANSWER 13 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 10
ACCESSION NUMBER: 1998:47702 BIOSIS
DOCUMENT NUMBER: PREV199800047702
TITLE: A new compound heterozygous mutation in the 11beta-hydroxysteroid dehydrogenase type 2 gene in a case of apparent mineralocorticoid excess.
AUTHOR(S): **Kitanaka, Sachiko (1)**; Katsumata, Noriyuki; Tanae, Ayako; Hibi, Itsuro; **Takeyama, Ken-Ichi;** Fuse, Hiroaki; **Kato, Shigeaki**; Tanaka, Toshiaki
CORPORATE SOURCE: (1) Inst. Mol. Cell. Biosci., Univ. Tokyo, 1-1-1 Yayoi, Bunkyo-ku, Tokyo 113 Japan
SOURCE: Journal of Clinical Endocrinology & Metabolism, (Dec., 1997) Vol. 82, No. 12, pp. 4054-4058.
ISSN: 0021-972X.
DOCUMENT TYPE: Article
LANGUAGE: English

L5 ANSWER 14 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 11
ACCESSION NUMBER: 1997:448293 BIOSIS
DOCUMENT NUMBER: PREV199799747496
TITLE: 25-Hydroxyvitamin D-3 1-alpha-hydroxylase and vitamin D synthesis.
AUTHOR(S): **Takeyama, Ken-Ichi; Kitanaka, Sachiko;** Sato, Takashi; Kobori, Masato; Yanagisawa, Junn; **Kato, Shigeaki (1)**
CORPORATE SOURCE: (1) Inst. Molecular Cellular Biosciences, Univ. Tokyo, Yayoi, Bunkyo-ku, Tokyo 113 Japan
SOURCE: Science (Washington D C), (1997) Vol. 277, No. 5333, pp. 1827-1830.
ISSN: 0036-8075.

DOCUMENT TYPE: Article
LANGUAGE: English

=> s ligand (s) precusor (s) nuclear (s) receptor
L6 1 LIGAND (S) PRECUSOR (S) NUCLEAR (S) RECEPTOR

=> s ligand (s) precursor (s) nuclear (s) receptor
L7 324 LIGAND (S) PRECURSOR (S) NUCLEAR (S) RECEPTOR

=> s ligand (s) precursor (s) nuclear (s) receptor (s) vitamin
L8 36 LIGAND (S) PRECURSOR (S) NUCLEAR (S) RECEPTOR (S) VITAMIN

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PROCESSING COMPLETED FOR L8
L9 13 DUP REM L8 (23 DUPLICATES REMOVED)

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L9 ANSWER 1 OF 13 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 2002613512 IN-PROCESS
DOCUMENT NUMBER: 22257731 PubMed ID: 12370121
TITLE: The murine gene encoding parathyroid hormone: genomic organization, nucleotide sequence and transcriptional regulation.
AUTHOR: He B; Tong T K; Hiou-Tim F F-T; Al-Akad B; Kronenberg H M; Karaplis A C
CORPORATE SOURCE: Department of Medicine, SMBD-Jewish General Hospital, Lady Davis Institute for Medical Research, McGill University, 3755 Cote Ste-Catherine Road, Montreal, Quebec H3T 1E2, Canada.
SOURCE: JOURNAL OF MOLECULAR ENDOCRINOLOGY, (2002 Oct) 29 (2) 193-203.
Journal code: 8902617. ISSN: 0952-5041.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20021010
Last Updated on STN: 20021213
AB The type 1 parathyroid hormone **receptor** (PTHR1) binds, with equal affinity, two **ligands** with distinct biological functions: PTH, the major peptide hormone controlling calcium homeostasis, and the paracrine factor, PTH-related peptide (PTHrP), a local regulator of cellular proliferation and differentiation. To clarify the complexity of possible interactions between two distinct **ligands**, PTH and PTHrP, and their common **receptor** in the intact organism, and to identify as yet unrecognized roles for PTH in normal physiology, we have cloned and. . . and, analogous to the human PTH gene, it is interrupted by two introns. The deduced mRNA encodes the 115-amino acid **precursor**, preproPTH. Comparison of the murine preproPTH sequence with other mammalian forms of the protein shows it to be highly conserved. . . share limited structural similarity to PTHrP at the amino-terminal region, a domain critical for binding and activation of their common **receptor**. Putative binding motifs for the transcription factors sex-determining region Y gene product, transcriptional repressor CDP, hepatic **nuclear** factor 3beta, GATA-binding factor 1, glucocorticoid **receptor**, SRY-related high mobility group box protein 5 and cAMP response element binding protein were identified in the 5' flanking region. . . Pth gene. When placed upstream of a reporter gene, these sequences failed to confer transcriptional regulation in response to 1,25(OH)(2) **vitamin** D(3), but responded positively to the addition of isoproterenol and forskolin. Mutational analysis identified a cAMP-response element in the Pth. . .

L9 ANSWER 2 OF 13 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 2001684330 MEDLINE
DOCUMENT NUMBER: 21586214 PubMed ID: 11729302
TITLE: Nuclear receptors and lipid physiology: opening the X-files.
AUTHOR: Chawla A; Repa J J; Evans R M; Mangelsdorf D J
CORPORATE SOURCE: Howard Hughes Medical Institute, Gene Expression Laboratory, The Salk Institute for Biological Studies, Post Office Box 85800, San Diego, CA 92186-5800, USA.
SOURCE: SCIENCE, (2001 Nov 30) 294 (5548) 1866-70. Ref: 69
Journal code: 0404511. ISSN: 0036-8075.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200112
ENTRY DATE: Entered STN: 20011204
Last Updated on STN: 20021227
Entered Medline: 20011231

AB Cholesterol, fatty acids, fat-soluble **vitamins**, and other lipids present in our diets are not only nutritionally important but serve as **precursors** for **ligands** that bind to **receptors** in the nucleus. To become biologically active, these lipids must first be absorbed by the intestine and transformed by metabolic. . . regarding the mechanisms that govern these pathways. Specifically, what is the nature of communication between these bioactive lipids and their **receptors**, binding proteins, transporters, and metabolizing enzymes that links them physiologically and speaks to a higher level of metabolic control? Some general principles that govern the actions of this class of bioactive lipids and their **nuclear receptors** are considered here, and the scheme that emerges reveals a complex molecular script at work.

L9 ANSWER 3 OF 13 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 2001563418 MEDLINE
DOCUMENT NUMBER: 21521418 PubMed ID: 11641059
TITLE: Regulation of human profilaggrin promoter activity in cultured epithelial cells by retinoic acid and glucocorticoids.
AUTHOR: Presland R B; Tomic-Canic M; Lewis S P; Dale B A
CORPORATE SOURCE: Department of Oral Biology, University of Washington, Box 357132, Seattle, WA 98195-7132, USA.. rp@u.washington.edu
CONTRACT NUMBER: AR45974 (NIAMS)
P01 AM 21557 (NIADDK)
R37 DE 04660 (NIDCR)
SOURCE: JOURNAL OF DERMATOLOGICAL SCIENCE, (2001 Nov) 27 (3) 192-205.
Journal code: 9011485. ISSN: 0923-1811.
PUB. COUNTRY: Ireland
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200112
ENTRY DATE: Entered STN: 20011022
Last Updated on STN: 20020122
Entered Medline: 20011205

AB **Vitamin** A and other retinoids profoundly inhibit both morphological and biochemical aspects of epidermal differentiation in vitro. Profilaggrin, like most other. . . the activity of endoproteases that convert profilaggrin to filaggrin. Profilaggrin is an abundant component of keratohyalin granules and forms the **precursor** of filaggrin, the keratin associated protein of the stratum corneum. In this report, we identify a region of the human. . . reporter gene were

prepared and analyzed by transfection into Hela cells and keratinocytes. We also cotransfected vectors expressing retinoic acid **receptor** and cultured the transfected cells in the presence and absence of **ligand**. The region responsive to retinoic acid was localized to a 53 bp sequence between -1109 and -1056 (relative to the. . . a cluster of five retinoic acid response elements with variable spacing and orientation. In vitro gel shift analysis demonstrated that **nuclear** retinoid **receptors** do not bind directly to the identified sequence, suggesting that the mode of regulation by RA may be indirect or that binding requires another cofactor in addition to retinoid **receptors**. Whereas in keratin genes retinoic acid and glucocorticoid responsive sequences frequently coincide, the glucocorticoid response element in the profilaggrin promoter. . .

L9 ANSWER 4 OF 13 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2002:129801 BIOSIS
DOCUMENT NUMBER: PREV200200129801
TITLE: X-retinoic acid receptor a fusion genes in acute promyelocytic leukemia interfere with retinoid and peroxisome-proliferator signaling pathways.
AUTHOR(S): Hamadani, Soheila A. (1); Zhang, Tong; Dorrell, Craig; Dick, John; Wells, Richard; Kamel-Reid, Suzanne
CORPORATE SOURCE: (1) Laboratory Medicine and Pathobiology and Molecular and Medical Genetics, Institute of Medical Science, University of Toronto, Toronto, ON Canada
SOURCE: Blood, (November 16, 2001) Vol. 98, No. 11 Part 1, pp. 88a. http://www.bloodjournal.org/. print.
Meeting Info.: 43rd Annual Meeting of the American Society of Hematology, Part 1 Orlando, Florida, USA December 07-11, 2001
ISSN: 0006-4971.
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Acute promyelocytic-leukemia (APL) is characterized by selected expansion of immature myeloid **precursors** that are blocked at the promyelocytic stage of development. In APL, five different fusion partners of RARalpha have been identified, these include the promyelocytic leukemia gene (PML), the promyelocytic leukemia zine finger gene (PLZF), nucleophosmin (NPM), **nuclear** mitotic apparatus (NuMA), and the Stat5b gene. The fact that all APL subtypes with various RAR fusion partners are clinically. . . through the heterodimerization of RXRs and PPARs that can bind to specific peroxisome proliferator response elements (PPREs). Both normal retinoid **receptors** and PML-RARalpha bind and activate the PPAR responsive element of the Acyl-CoA oxidase gene, indicating that retinoids and peroxisome proliferator **receptors** may share common target genes. As RXR is required for both RAR and PPAR to bind to the RARE and. . . the effect of X-RARalpha fusion proteins on the transactivating potential of RARalpha and PPARgamma in the presence or absence of **ligand**. Triplicate plates of COS7 cells were transiently transfected with four of the X-RARalpha fusion genes and reporter plasmids. The transactivation. . . different from the other APL fusion proteins as it results transcriptional superactivation at both RARE and PPRE upon treatment with **ligand**. By gel mobility shift assay we show that X-RARalpha fusion proteins bind differently to RARE and PPRE. Consistent with our. . . of NuMA-RARalpha into the myeloid leukemia cell line U937 reveals that these cells become resistant to the differentiative effects of **vitamin** D3. However, the response to TPA is intact, as examined by changes in cell surface markers (CD11b, CD14 and CD36). . .

L9 ANSWER 5 OF 13 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 2001322651 MEDLINE
DOCUMENT NUMBER: 21131917 PubMed ID: 11237167
TITLE: Carotenoids and retinoids as suppressors on adipocyte differentiation via nuclear receptors.

AUTHOR: Kawada T; Kamei Y; Fujita A; Hida Y; Takahashi N; Sugimoto E; Fushiki T
CORPORATE SOURCE: Division of Applied Life Sciences, Graduate School of Agriculture, Kyoto University, Japan.. fat@kais.kyoto-u.ac.jp
SOURCE: BIOFACTORS, (2000) 13 (1-4) 103-9.
Journal code: 8807441. ISSN: 0951-6433.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200106
ENTRY DATE: Entered STN: 20010611
Last Updated on STN: 20010611
Entered Medline: 20010607

AB The adipocyte differentiation program is regulated by the sequential expression of transcriptional activators, mainly peroxisome proliferator activated **receptor** (PPAR) families. In the present study, we have decided to systematically examine the effects of **vitamin** A and its **precursors**, carotenoids and retinoids, on terminal differentiation from preadipocytes to adipocytes on the cellular and molecular aspects. The effects of active form of **vitamin** A, retinoic acid (RA), are believed to be mediated by specific **nuclear receptor** proteins [retinoic acid **receptor** (RAR)] which are members of the steroid and thyroid/retinoid **receptor** superfamily of **ligand** dependent transcriptional regulators, RARalpha, RARgamma, RXRalpha, and RXRbeta mRNA were abundant in adipose tissue and 3T3-L1 adipose cells. The autoregulated amplification of RARgamma mRNA was observed by these own **ligands** in 3T3-L1 cells. And, RA inhibited PPARgamma2 expression more effectively and caused concomitantly a greater inhibition of adipocyte differentiation. These. . . and retinoids are exhibited through the RAR up-regulation and the suppression of PPARgamma2. The nature of the cross talk of **vitamin** A actions between the RARs, RXRs and PPARs via co-activator in adipose tissue will likely prove to be important for. . .

L9 ANSWER 6 OF 13 MEDLINE DUPLICATE 5
ACCESSION NUMBER: 1999253823 MEDLINE
DOCUMENT NUMBER: 99253823 PubMed ID: 10321906
TITLE: Expression of the vitamin D receptor, of estrogen and thyroid hormone receptor alpha- and beta-isoforms, and of the androgen receptor in cultures of native mouse bone marrow and of stromal/osteoblastic cells.
AUTHOR: Gruber R; Czerwenka K; Wolf F; Ho G M; Willheim M; Peterlik M
CORPORATE SOURCE: Department of General and Experimental Pathology, University of Vienna Medical School, Austria.
SOURCE: BONE, (1999 May) 24 (5) 465-73.
Journal code: 8504048. ISSN: 8756-3282.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199907
ENTRY DATE: Entered STN: 19990727
Last Updated on STN: 19990727
Entered Medline: 19990714

AB Marrow stromal cells mediate the effect of 1alpha,25-dihydroxyvitamin D3 on formation of osteoclast-like cells from undifferentiated hematopoetic **precursors** in bone marrow. Induction by the **vitamin** D hormone of multinucleated, calcitonin **receptor**- and tartrate-resistant acid phosphatase-positive cells in primary mouse bone marrow culture can be modulated by other members of the steroid/thyroid. . . inhibitors of osteoclastogenesis. In an attempt to relate these

effects of the steroid/thyroid hormones to the presence of their respective **nuclear receptors**, we studied expression of the **vitamin** D **receptor** (VDR), estrogen **receptor** (ER)-alpha and -beta, thyroid hormone **receptor** (TR)-alpha and -beta, and androgen **receptor** (AR) in total bone marrow as well as primary marrow stromal cell cultures. By using reverse-transcriptase-polymerase chain reaction, in both. . . amplification products were obtained, which were identified by multiple restriction fragment length analysis as transcripts from mRNA specific for the **ligand**-binding domains of the VDR, ER-alpha, ER-beta, TR-alpha, TR-beta, and AR. Specific immunostaining by indirect peroxidase labeling revealed that among the various cell types present in bone marrow, the steroid/ thyroid hormone **receptors** are abundant particularly in marrow stromal cells. In another series of experiments, we extended our survey on **receptor** expression also to stromal/osteoblastic cell lines. At the mRNA level, the complete repertoire of steroid/thyroid hormone **receptors** was present in preadipocytic ST2 cells as well as in osteoblastic MC3T3-E1 cells. By immunocytochemical staining of the latter, it became apparent that single cells exhibit wide variations in intensity of specific signals for all the **receptors** investigated, so that, notably in contrast to primary stromal cells and ST2 cells, MC3T3-E1 display a mosaic pattern of **receptor** protein expression.

L9 ANSWER 7 OF 13 MEDLINE DUPLICATE 6
ACCESSION NUMBER: 1999191703 MEDLINE
DOCUMENT NUMBER: 99191703 PubMed ID: 10091603
TITLE: Stimulation of premature retinoic acid synthesis in Xenopus embryos following premature expression of aldehyde dehydrogenase ALDH1.
AUTHOR: Ang H L; Duester G
CORPORATE SOURCE: Gene Regulation Program, Burnham Institute, La Jolla, CA 92037, USA.
CONTRACT NUMBER: AA07261 (NIAAA)
SOURCE: EUROPEAN JOURNAL OF BIOCHEMISTRY, (1999 Feb) 260 (1) 227-34.
Journal code: 0107600. ISSN: 0014-2956.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF061833
ENTRY MONTH: 199904
ENTRY DATE: Entered STN: 19990504
Last Updated on STN: 19990504
Entered Medline: 19990422
AB In order for **nuclear** retinoic acid **receptors** to mediate retinoid signaling, the **ligand** retinoic acid must first be produced from its **vitamin** A **precursor** retinal. Biochemical studies have shown that retinal can be metabolized in vitro to retinoic acid by members of the aldehyde. . .

L9 ANSWER 8 OF 13 MEDLINE DUPLICATE 7
ACCESSION NUMBER: 2000075981 MEDLINE
DOCUMENT NUMBER: 20075981 PubMed ID: 10609868
TITLE: Lipid soluble vitamins in gene regulation.
AUTHOR: Carlberg C
CORPORATE SOURCE: Institut fur Physiologische Chemie I, Heinrich-Heine-Universitat, Dusseldorf, Germany.. carlberg@uni-duesseldorf.de
SOURCE: BIOFACTORS, (1999) 10 (2-3) 91-7. Ref: 44
Journal code: 8807441. ISSN: 0951-6433.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)

(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200002
ENTRY DATE: Entered STN: 20000209
Last Updated on STN: 20000209
Entered Medline: 20000201

AB **Vitamin** A (retinol) and **vitamin** D are lipid soluble **vitamins** that are **precursors** of the **nuclear** hormones all-trans retinoic acid (RA) and 1alpha,25-dihydroxyvitamin D3 (VD) that bind with high affinity to their cognate **nuclear receptors**, referred to as retinoic acid **receptor** (RAR) and **vitamin** D **receptor** (VDR). Both types of **nuclear receptors** are structurally related and belong to the same subclass of the **nuclear receptor** superfamily, a large family of **ligand**-inducible transcription factors. Both RAR and VDR form heterodimers preferentially with the **nuclear receptor** for 9-cis RA, referred to as the retinoid X **receptor** (RXR), but functional RAR-VDR heterodimers have also been observed. Moreover, both types of **nuclear receptors** interact in a **ligand**-dependent fashion with members of the same class of co-activator, co-repressor and co-integrator proteins. These similar molecular mechanisms of action provide. . . can result in either an additive or a transrepressive functional interference between RA and VD. The two remaining lipid soluble **vitamins**, **vitamins** E and K, are not known to interact with **nuclear receptors**, but their structure does not exclude this possibility. Moreover, for **vitamin** E modulatory effects on transcription factors, such as AP-1, have been described. This review will discuss briefly gene regulation by the four lipid soluble **vitamins**.

L9 ANSWER 9 OF 13 MEDLINE DUPLICATE 8
ACCESSION NUMBER: 1998151023 MEDLINE
DOCUMENT NUMBER: 98151023 PubMed ID: 9492059
TITLE: Ligand-dependent regulation of retinoic acid receptor alpha in rat testis: in vivo response to depletion and repletion of vitamin A.
AUTHOR: Akmal K M; Dufour J M; Vo M; Higginson S; Kim K H
CORPORATE SOURCE: Department of Genetics and Cell Biology, Center for Reproductive Biology, Washington State University, Pullman 99164, USA.
SOURCE: ENDOCRINOLOGY, (1998 Mar) 139 (3) 1239-48.
Journal code: 0375040. ISSN: 0013-7227.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
OTHER SOURCE: GENBANK-U15211
ENTRY MONTH: 199803
ENTRY DATE: Entered STN: 19980319
Last Updated on STN: 20000303
Entered Medline: 19980312

AB Male animals are sterile due to testicular degeneration in the absence of retinoic acid (RA) or functional retinoic acid **receptor**-alpha (RAR alpha). This degeneration can be reversed by injecting retinol, a **precursor** of RA, into **vitamin** A-deficient (VAD) rats. To determine the relationship between this **ligand**-dependent testicular degeneration and regeneration and the expression levels of RAR alpha messenger RNA and protein, testes were depleted and then. . . advanced germ cells. Interestingly, the advanced germ cells still contained RAR alpha, but the protein was primarily cytoplasmic instead of **nuclear**, indicating inactivity as a transcription factor. In VAD testis, RAR alpha levels were low and then increased primarily in Sertoli. . .

L9 ANSWER 10 OF 13 MEDLINE DUPLICATE 9
ACCESSION NUMBER: 1998200046 MEDLINE
DOCUMENT NUMBER: 98200046 PubMed ID: 9540977
TITLE: Keratinocyte differentiation is stimulated by activators of the nuclear hormone receptor PPARalpha.
AUTHOR: Hanley K; Jiang Y; He S S; Friedman M; Elias P M; Bikle D D; Williams M L; Feingold K R
CORPORATE SOURCE: Department of Dermatology, University of California, San Francisco, USA.
CONTRACT NUMBER: AR 39639 (NIAMS)
AR29706 (NIAMS)
HD 29706 (NICHD)
+
SOURCE: JOURNAL OF INVESTIGATIVE DERMATOLOGY, (1998 Apr) 110 (4) 368-75.
Journal code: 0426720. ISSN: 0022-202X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Space Life Sciences
ENTRY MONTH: 199805
ENTRY DATE: Entered STN: 19980514
Last Updated on STN: 20020124
Entered Medline: 19980504
AB Peroxisome proliferator activated **receptors** (PPAR) belong to the superfamily of **nuclear** hormone **receptors** that heterodimerize with the retinoid X **receptor** and regulate transcription of several genes involved in lipid metabolism and adipocyte differentiation. Because of the role of 1,25-dihydroxyvitamin D3 and retinoic acid working through similar **receptors** (the **vitamin** D **receptor** and retinoic acid **receptor**, respectively) on keratinocyte differentiation, we have examined the effects of activators of PPARalpha on keratinocyte differentiation. The rate of cornified. . . low calcium (0.03 mM) and incubated in the presence of clofibric acid, a potent PPARalpha activator. Involucrin, a cornified envelope **precursor**, and the cross-linking enzyme transglutaminase, were increased at both the message level (2-7-fold) and the protein level (4-12-fold) by clofibric. . . by itself induces keratinocyte differentiation. Finally, PPARalpha activators inhibit DNA synthesis. This study demonstrates that PPARalpha activators, including putative endogenous **ligands** such as fatty acids, induce differentiation and inhibit proliferation in keratinocytes, and suggests a regulatory role for the PPARalpha in. . .

L9 ANSWER 11 OF 13 MEDLINE DUPLICATE 10
ACCESSION NUMBER: 1998025946 MEDLINE
DOCUMENT NUMBER: 98025946 PubMed ID: 9379138
TITLE: The vitamin D hormone and its nuclear receptor: molecular actions and disease states.
AUTHOR: Haussler M R; Haussler C A; Jurutka P W; Thompson P D; Hsieh J C; Remus L S; Selznick S H; Whitfield G K
CORPORATE SOURCE: Department of Biochemistry, College of Medicine, University of Arizona, Tucson 85724, USA.
CONTRACT NUMBER: AR 15781 (NIAMS)
DK33351 (NIDDK)
DK49604 (NIDDK)
SOURCE: JOURNAL OF ENDOCRINOLOGY, (1997 Sep) 154 Suppl S57-73.
Ref: 93
Journal code: 0375363. ISSN: 0022-0795.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Space Life Sciences

ENTRY MONTH: 199711
ENTRY DATE: Entered STN: 19971224
Last Updated on STN: 19971224
Entered Medline: 19971112

AB **Vitamin** D plays a major role in bone mineral homeostasis by promoting the transport of calcium and phosphate to ensure that. . . these ions are sufficient for the normal mineralization of type I collagen matrix in the skeleton. In contrast to classic **vitamin** D-deficiency rickets, a number of **vitamin** D-resistant rachitic syndromes are caused by acquired and hereditary defects in the metabolic activation of the **vitamin** to its hormonal form, 1,25-dihydroxyvitamin D3 (1,25(OH)2D3), or in the subsequent functions of the hormone in target cells. The actions of 1,25(OH)2D3 are mediated by the **nuclear vitamin** D **receptor** (VDR), a phosphoprotein which binds the hormone with-high affinity and regulates the expression of genes via zinc finger-mediated DNA binding and protein-protein interactions. In hereditary hypocalcemic **vitamin** D-resistant rickets (HVDRR), natural mutations in human VDR that confer patients with tissue insensitivity to 1,25(OH)2D3 are particularly instructive in revealing VDR structure function relationships. These mutations fall into three categories: (i) DNA binding/**nuclear** localization, (ii) hormone binding and (iii) heterodimerization with retinoid X **receptors** (RXRs). That all three classes of VDR mutations generate the HVDRR phenotype is consistent with a basic model of the active **receptor** as a DNA-bound, 1,25(OH)2D3-liganded heterodimer of VDR and RXR. **Vitamin** D responsive elements (VDREs) consisting of direct hexanucleotide repeats with a spacer of three nucleotides have been identified in the promoter regions of positively controlled genes expressed in bone, such as osteocalcin, osteopontin, beta 3-integrin and **vitamin** D 24-OHase. The 1,25(OH)2D3 **ligand** promotes VDR-RXR heterodimerization and specific, high affinity VDRE binding, whereas the **ligand** for RXR, 9-cis retinoic acid (9-cis RA), is capable of suppressing 1,25(OH)2D3-stimulated transcription by diverting RXR to form homodimers. However,. . . the AF-2 domains participate neither in VDR-RXR heterodimerization nor in TFIIB association, it is hypothesized that they contact, in a **ligand**-dependent fashion, transcriptional coactivators such as those of the steroid **receptor** coactivator family, constituting yet a third protein-protein interaction for VDR. Therefore, in VDR-mediated transcriptional activation, 1,25(OH)2D3 binding to VDR alters the conformation of the **ligand** binding domain such that it: (i) engages in strong heterodimerization with RXR to facilitate VDRE binding, (ii) influences the RXR **ligand** binding domain such that it is resistant to the binding of 9-cis RA but active in recruiting coactivator to its. . . to attract TFIIB and the balance of the RNA polymerase II transcription machinery, culminating in repeated transcriptional initiation of VDRE-containing, **vitamin** D target genes. Such a model would explain the action of 1,25(OH)2D3 to elicit bone remodeling by stimulating osteoblast and osteoclast **precursor** gene expression, while concomitantly triggering the termination of its hormonal signal by inducing the 24-OHase catabolizing enzyme.

L9 ANSWER 12 OF 13 MEDLINE DUPLICATE 11
ACCESSION NUMBER: 96209825 MEDLINE
DOCUMENT NUMBER: 96209825 PubMed ID: 8643496
TITLE: Novel retinoic acid receptor ligands in Xenopus embryos.
AUTHOR: Blumberg B; Bolado J Jr; Derguini F; Craig A G; Moreno T A; Chakravarti D; Heyman R A; Buck J; Evans R M
CORPORATE SOURCE: Gene Expression Laboratory, Salk Institute for Biological Studies, La Jolla, CA 92037, USA.
CONTRACT NUMBER: CA54418 (NCI)
DK48022 (NIDDK)
HD27183 (NICHD)
SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1996 May 14) 93 (10) 4873-8.

Journal code: 7505876. ISSN: 0027-8424.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199607
ENTRY DATE: Entered STN: 19960726
Last Updated on STN: 19960911
Entered Medline: 19960718

AB Retinoids are a large family of natural and synthetic compounds related to **vitamin** A that have pleiotropic effects on body physiology, reproduction, immunity, and embryonic development. The diverse activities of retinoids are primarily mediated by two families of **nuclear** retinoic acid **receptors**, the RARs and RXRs. Retinoic acids are thought to be the only natural **ligands** for these **receptors** and are widely assumed to be the active principle of **vitamin** A. However, during an unbiased, bioactivity-guided fractionation of Xenopus embryos, we were unable to detect significant levels of all-trans or. . . is capable of binding to and transactivating RARs. In addition to its inherent activity, 4-oxoretinaldehyde appears to be a metabolic **precursor** of two other RAR **ligands**, 4-oxoretinoic acid and 4-oxoretinol. The remarkable increase in activity of retinaldehyde and retinol as a consequence of 4-oxo derivatization suggests. . .

L9 ANSWER 13 OF 13 MEDLINE
ACCESSION NUMBER: 95012031 MEDLINE
DOCUMENT NUMBER: 95012031 PubMed ID: 7927175
TITLE: An overexpression of retinoic acid receptor alpha blocks myeloid cell differentiation at the promyelocyte stage.
AUTHOR: Onodera M
CORPORATE SOURCE: Department of Pediatrics, Hokkaido University School of Medicine, Sapporo, Japan.
SOURCE: HOKKAIDO IGAKU ZASSHI. HOKKAIDO JOURNAL OF MEDICAL SCIENCE, (1994 May) 69 (3) 466-75, 477.
Journal code: 17410290R. ISSN: 0367-6102.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Japanese
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199410
ENTRY DATE: Entered STN: 19941222
Last Updated on STN: 19941222
Entered Medline: 19941026

AB Retinoic acid (RA), a **vitamin** A derivative, exerts a wide range of biological effects related to cell proliferation and differentiation. The pleiotropic effects of RA are thought to be mediated through specific **nuclear** RA **receptors** (RARs). RARs are members of the steroid/thyroid hormone **receptor** superfamily and exhibit a molecular structure that possess discrete DNA-binding and RA (**ligand**)-binding domains. In hematopoietic system, RA and RARs, predominantly RAR alpha may play key roles for the proliferation and differentiation of. . . is effective to suppress myeloid cell differentiation and RAR alpha plays a crucial role in the terminal differentiation of myeloid **precursors**. The system described here may serve as a model for studying the the essential genes for differentiation of normal bone. . .

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	58.99	59.20

STN INTERNATIONAL LOGOFF AT 09:26:58 ON 07 JAN 2003

L Number	Hits	Search Text	DB	Time stamp
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-	0	(vitamin adj d3) same convert same polypeptide same method same ligand same (nuclear adj receptor)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/15 15:06
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-	0	(vitamin adj d) same convert same polypeptide same method same ligand	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/15 15:07
-	0	(vitamin adj d) same convert same polypeptide same method	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/15 15:07
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-	50	(nuclear adj receptor) and gene and screen? and ligand and precursor	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 08:14
-	3	(nuclear adj receptor) and gene and screen? and (ligand same precursor)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 08:55
-	2	(nuclear adj receptor) and gene and screen? and (ligand same precursor) and conversion	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 08:19
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-	0	PPAR and ligand and precusor and conversion and reporter and gene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 08:34
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-	0	(nuclear adj receptor) and gene and screen? and (vitmin adj d)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 08:56
-	32	(nuclear adj receptor) and gene and screen? and (vitamin adj d)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 09:24
-	13	(nuclear adj receptor) and gene and screen? and (VDR)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 09:28

-	632	gene and screen? and (vitamin d3 adj receptor)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 09:29
-	3	gene same screen? same (vitamin d3 adj receptor)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 09:29
-	1182	(vitamin d3 adj receptor) and (reporter adj gene)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 09:30
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-	1	(vitamin adj d3 adj receptor) same modulator	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 10:12
-	0	(vitamin adj d3 adj receptor) same (reporter adj gene)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 10:13
-	25	(vitamin adj d adj receptor) same (reporter adj gene)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 10:13
-	222	(nuclear adj receptor) and (reporter adj gene) and cloning and vector	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 14:53
-	0	(nuclear adj receptor) same (reporter adj gene) same cloning same vector	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 14:54
-	35	(nuclear adj receptor) same (reporter adj gene) and cloning and vector	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 14:57
-	9	(nuclear adj receptor) same (reporter adj gene) and cloning and cell and screen?	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 15:01
-	49	(nuclear adj receptor) same (reporter adj gene)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/04/16 15:02